Storm Data and Unusual Weather Phenomena

April 1999

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
INDIANA, Northeast									
Miami County									
5 E Bennetts Switch to Wawpecong	**09**	**0115EST**			**0**	**0**	**5K**		**Thunderstorm Wind**
Trees and power lines were blown down due to a small downburst that hit the south central part of the county.									
Jay County									
Boundary City	**09**	**0915EST**			**0**	**0**	**50K**		**Thunderstorm Wind**
A mobile home was completely destroyed by the high winds. A nearby house sustained considerable damage with several large trees blown down as well.									
La Porte County									
La Porte	**10**	**1830EST**			**0**	**0**			**Hail (0.75)**
La Porte County									
3 NW La Porte	**10**	**1833EST**			**0**	**0**			**Hail (0.75)**
La Porte County									
La Porte	**10**	**1900EST**			**0**	**0**			**Hail (1.50)**
Hail caused some roof and auto damage in town due to the extended hail fall with several inches accumulating in some parts of town.									
St. Joseph County									
Sbn Michiana Arpt	**10**	**1903EST**			**0**	**0**			**Hail (0.75)**
St. Joseph County									
1 N South Bend	**10**	**1905EST**			**0**	**0**			**Hail (1.25)**
St. Joseph County									
Sbn Michiana Arpt	**10**	**1906EST**			**0**	**0**			**Hail (1.25)**
St. Joseph County									
Mishawaka	**10**	**1918EST**			**0**	**0**			**Hail (0.75)**
St. Joseph County									
Mishawaka	**10**	**1919EST**			**0**	**0**			**Hail (1.00)**
St. Joseph County									
2 NW Osceola	**10**	**1920EST**			**0**	**0**			**Hail (1.00)**
St. Joseph County									
1 E Mishawaka	**10**	**1924EST**			**0**	**0**			**Hail (1.00)**
St. Joseph County									
Osceola	**10**	**1928EST**			**0**	**0**			**Hail (0.75)**
Elkhart County									
1 W Elkhart	**10**	**1932EST**			**0**	**0**			**Hail (1.00)**
Elkhart County									
1 E Elkhart	**10**	**1937EST**			**0**	**0**			**Hail (0.75)**
Pulaski County									
Winamac	**10**	**1937EST**			**0**	**0**			**Hail (1.75)**
Marshall County									
1 N Lapaz	**10**	**1945EST**			**0**	**0**			**Hail (0.75)**
Elkhart County									
Wakarusa	**10**	**1953EST**			**0**	**0**			**Hail (0.75)**
Elkhart County									
Waterford Mills	**10**	**2000EST**			**0**	**0**			**Hail (0.88)**

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INDIANA, Northeast									
Fulton County									
Rochester	**10**	**2000EST**			**0**	**0**			**Hail (1.75)**
Fulton County									
Rochester	**10**	**2000EST 2003EST**			**0**	**0**			**Hail (0.75)**
Fulton County									
Talma	**10**	**2000EST**			**0**	**0**			**Hail (0.75)**
Fulton County									
2 S Rochester	**10**	**2003EST**			**0**	**0**			**Hail (1.00)**
Kosciusko County									
Syracuse	**10**	**2010EST**			**0**	**0**			**Hail (1.00)**
Lagrange County									
Topeka	**10**	**2014EST**			**0**	**0**			**Hail (1.00)**
Noble County									
Albion to 5 ESE Albion	**10**	**2014EST 2020EST**			**0**	**0**	**50K**		**Thunderstorm Wind**
Numerous trees were blown down starting in the town of Albion and continuing along for 5 miles just south of highway 8. Several homes sustained minor damage. One mobile home 2 miles southeast of Albion was destroyed. Two farmsteads had their grain bins blown down and another farmstead had a barn destroyed by the high winds.									
Noble County									
Ligonier	**10**	**2019EST**			**0**	**0**			**Hail (1.00)**
Noble County									
Ligonier	**10**	**2019EST**			**0**	**0**			**Hail (1.75)**
Noble County									
Wolflake	**10**	**2039EST**			**0**	**0**			**Hail (0.75)**
Wabash County									
2 NE North Manchester	**10**	**2040EST**			**0**	**0**			**Hail (0.75)**
De Kalb County									
Auburn	**10**	**2055EST**			**0**	**0**	**20K**		**Thunderstorm Wind**
One home had its roof blown off with several large trees and limbs down in town.									
Whitley County									
Churubusco	**10**	**2057EST**			**0**	**0**			**Hail (0.75)**
Allen County									
Ft Wayne	**10**	**2105EST**			**0**	**0**			**Hail (1.75)**
De Kalb County									
Auburn	**10**	**2105EST**			**0**	**0**			**Hail (0.75)**
Allen County									
5 NE Ft Wayne	**10**	**2115EST**			**0**	**0**			**Hail (1.00)**
Steuben County									
Hamilton	**10**	**2130EST**			**0**	**0**			**Hail (0.75)**
Miami County									
Denver	**11**	**0007EST**			**0**	**0**			**Hail (0.75)**
Marshall County									
Argos	**22**	**1530EST**			**0**	**0**	**3K**		**Thunderstorm Wind**
Conservation officer reported to county sheriff that trees and power lines were down.									

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INDIANA, Northeast

Marshall County
Bourbon **22** **1530EST** **0** **0** **Thunderstorm Wind (G60)**
Thunderstorm wind gusts damaged two 15-inch diameter pine trees. Tree trunks were broken half way up. Two other 15-inch diameter pine trees were uprooted.

Kosciusko County
Etna Green **22** **1540EST** **0** **0** **5K** **Thunderstorm Wind**
Sheiff and amateur radio operator reported several trees blown down and a roof blown off of a repair shop.

Kosciusko County
Warsaw **22** **1555EST** **0** **0** **Thunderstorm Wind (G60)**
Thunderstorm wind gusts of 55 to 60 MPH reported by an off-duty NWS employee.

Fulton County
Rochester **22** **1610EST** **0** **0** **Urban/Sml Stream Fld**
Flooding reported along State Road 110 and Old 31 north of Rochester.

Noble County
Albion **22** **1625EST** **0** **0** **Hail (0.75)**

Whitley County
Dunfee **22** **1655EST** **0** **0** **Hail (0.75)**
Spotter reported .75 inch hail in Dunfee.

Allen County
Ft Wayne **22** **1725EST** **0** **0** **Hail (0.75)**
Hail of .75 inch diameter reported by amateur radio operators at St. Francis College and at Coliseum Blvd. NW of Ft. Wayne.

Huntington County
Roanoke **22** **2020EST** **0** **0** **Urban/Sml Stream Fld**
Flooding reported by Huntington County Sheriff along US Route 24 and Roanoke Road/800N near Roanoke.

Wabash County
Liberty Mills **22** **2130EST** **0** **0** **Urban/Sml Stream Fld**
Water was reported to be over local roads in the vicinity of Liberty Mills.

Wabash County
North Manchester **22** **2130EST** **0** **0** **Urban/Sml Stream Fld**
State Road 13 was reported to be flooded south of North Manchester.

Allen County
Ft Wayne **22** **2145EST** **0** **0** **Urban/Sml Stream Fld**
Water was reported flowing across Interstate 469 at mile marker four 8 miles south of Ft. Wayne.

Allen County
Ft Wayne **22** **2145EST** **0** **0** **Urban/Sml Stream Fld**
U.S. Route 24 was reported to be flooded 10 miles south of Ft. Wayne.

A warm front across the southern Great Lakes region served as the focus for strong to severe thunderstorms. Overrunning precipitation was heavy enough to cause localized flooding over a narrow portion of northeastern Indiana. Thunderstorms training along the warm front dumped up to 2 inches of rain per hour across the region. Dew points were in the lower 60s south of the warm front and provided ample moisture for the convection to sustain itself. A low-level jet over southern Illinois and Indiana aided in the thunderstorm development.

OHIO, Northwest

Defiance County
Hicksville **10** **2115EST** **0** **0** **0** **Thunderstorm Wind**
Trees and power lines were reported blown down.

Paulding County
Paulding **10** **2140EST** **0** **0** **Hail (0.75)**

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OHIO, Northwest

Synoptic and mesoscale conditions on April 10th, 1999...

A strong low pressure system was located near St. Louis, MO during the afternoon of April 10, 1999 and was forecast to move northeast into southern Michigan by 12z on the 11th. Although the boundary layer was quite stable across northern Indiana with surface temperatures in the middle 50s and dewpoints in the low 30s... very unstable air was located south of the warm front draped through the Ohio valley. As low pressure intensified during the afternoon of the 10th...a strong low level jet (60 knots) developed from southern Illinois into central Indiana. Most unstable parcel CAPE lifted from 800 millibars were on the order of 1500 J/kg... lifted indicies from -3 to -5...and amazing storm relative helicity values near 1000 m2/s2. Strong mid-level convergence in association with the upper low in Missouri and attendant 80 knot jet combined with strong low-level theta-e advection over the warm front and increasing large scale ascent ahead of the 250 millibar 130 knot jet max triggered a line of severe thunderstorms over northeast Illinois by late afternoon.

This line of storms continued to intensify as they raced eastward at 40 knots. With low freezing levels in place and cooling aloft as the upper low pushed northeast...widespread severe hail fell in nearly every county across northern Indiana that evening. Two elevated supercells developed ahead of the main line in northwest Indiana early that evening and marched eastward. The first supercell tracked from Lake county east into Lagrange county before weakening. The second supercell developed further south across Jasper county and moved east into Allen county before weakening. Both were very efficient hail producers with some locations reporting several inches of hail accumulation on the ground. Additionally both produced several funnel clouds which stayed aloft likely due to the elevated nature of the convection and very stable boundary layer which prevented most of the rear flank downdraft from reaching the surface.